Next generation DC1 cell therapy

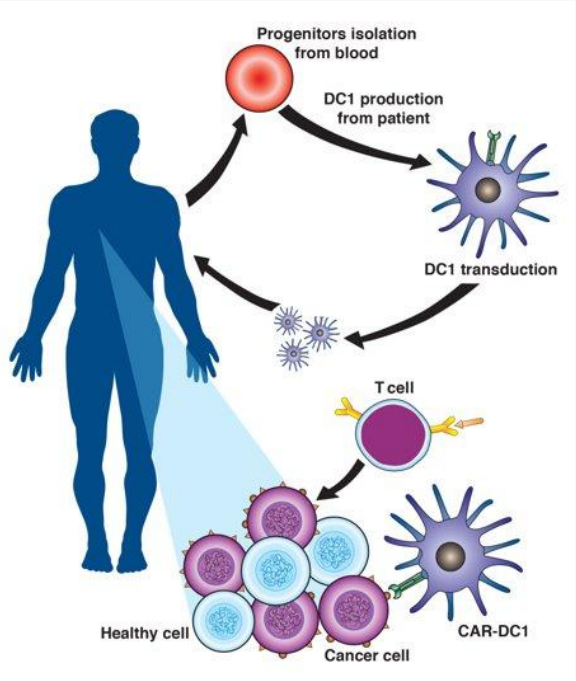
The Problem

- The “type 1” dendritic cell subset (DC1) are the right cell type for solid tumour cell therapy
- The use of DC1 cells in a cell therapy is limited by the inability to generate sufficient cell numbers

The Solution

A Human DC1 cell therapy, engineered to express a proprietary CAR which has:

- Better tumour infiltration
- Activation of immune system to kill tumour cells
- Recognition of multiple tumour antigens (epitope spreading)
- Overcomes tumour heterogeneity
- Longer persistence of therapeutic response



CAR-DC1s home better to tumours and activate a polyclonal, tumour-lytic T-cell response

Our Program

- Progress: Transferred scalable GMP-ready DC1 culture protocol to cell therapy CRO; strong preliminary POC data for tumour control with lead CAR construct
- Next steps: *in vivo* tumour control in humanized mice, including benchmarking with current therapies; CAR delivery optimization

We are ***seeking investment*** to progress our DC1 cell therapy into the clinic

Our Team

Prof. Stephen Nutt, CAR-DC development, WEHI
Prof. Shalin Naik, DC biology and manufacturing, WEHI
Prof. Simon Harrison, Cell therapy, Peter MacCallum Cancer Centre

Ewa Michalak, PhD, Business Development
michalak.e@wehi.edu.au